

### **REMARKS**

The Official Action mailed March 18, 2004, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on April 2, 2001, and December 15, 2003. However, the Applicants have not received acknowledgment of the Information Disclosure Statement filed on April 6, 2004. The Applicants respectfully request that the Examiner provide an initialed copy of the Form PTO-1449 evidencing consideration of the Information Disclosure Statement filed on April 6, 2004.

Claims 22-24 and 26-40 were pending in the present application prior to the above amendment. Claims 22-24 and 26-31 have been canceled, independent claims 32-34 have been amended to better recite the features of the present invention, dependent claims 35-37 have been amended to correct minor grammatical errors, and new claims 41-67 have been added to recite additional protection to which the Applicants are entitled. Accordingly, claims 32-67 are now pending in the present application, of which claims 32-34, 44-46 and 56-58 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 22-24 and 26-28 as anticipated by U.S. Patent No. 6,040,589 to Zhang et al. The Official Action rejects claims 29-31 as obvious based on the combination of Zhang and U.S. Patent No. 5,990,542 to Yamazaki. Claims 22-24, 26-31 have been canceled; therefore, the rejections are now moot.

The Official Action rejects claims 32-40 as obvious based on the combination of Zhang and Yamazaki. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present invention, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).


The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claim 32 has been amended to recite that "a concentration of a catalyst element in the active layer of the at least one p-channel thin film transistor is lower than that of the at least one n-channel thin film transistor." Independent claims 33 and 34 have been amended to recite that "a concentration of a catalyst element in the pair of impurity regions of the at least one p-channel thin film transistor is lower than that of the at least one n-channel thin film transistor." The above features are supported in the specification, for example, at the third paragraph of page 13 through page 14, line 2. Zhang and Yamazaki, either alone or in combination, do not teach or suggest at least the above-referenced features of the present invention.

Since Zhang and Yamazaki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New claims 41-67 have been added to recite additional protection to which the Applicants are entitled. Independent claim 44 also recites that "a concentration of a catalyst element in the active layer of the at least one p-channel thin film transistor is lower than that of the at least one n-channel thin film transistor." Independent claims 45 and 46 also recite that "a concentration of a catalyst element in the pair of impurity regions of the at least one p-channel thin film transistor is lower than that of the at least one n-channel thin film transistor." Independent claims 56-58 recite that "the pair impurity regions of the at least one n-channel thin film transistor have a catalyst element in a concentration of  $5 \times 10^{18}$  atoms/cm<sup>3</sup> or more." The above features are supported in the specification, for example, at the third paragraph of page 13 through page 14, line 2. Zhang and Yamazaki, either alone or in combination, do not teach or suggest at least the above-referenced features of the present invention. For the reasons stated above and already of record, the Applicants respectfully submit that new claims 41-67 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

  
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